

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for treating an external wound from a non-contact distance d, comprising the steps of:

positioning an ultrasound transducer ~~having~~ such that a distal radiation surface at ~~a~~ of the ultrasound transducer is positioned at a distance substantially equal to the non-contact distance d from the surface of the external wound; and

creating and maintaining ~~an~~ ultrasound standing waves between the surface of the external wound and the distal radiation surface, wherein the ultrasound standing waves are created and maintained in air along the non-contact distance d, wherein the non-contact distance d is determined by the formula:

$$d = n \times \lambda / 2,$$

~~wherein~~ where  $\lambda$  is the wavelength of the an ultrasound standing wave and n is a positive integer, and wherein the ultrasound standing waves ~~creates~~ create radiation pressure for providing a bactericidal and a therapeutic effect to the external wound for decreasing the healing time for the external wound.

2. (Original) The method of Claim 1, wherein the ultrasound transducer operates at a frequency of from about 10kHz to  $10^3$  MHz.

3. (Currently Amended) The method of Claim 1, wherein the non-contact distance d is at least 0.1 inch.

Claims 4 and 5. (Cancelled)

6. (Previously Presented) The method of Claim 1, wherein in a prior step a gel or drug is applied to the wound surface.

Claims 7 and 8. (Cancelled)

9. (Currently Amended) A system for treating an external wound with ultrasound standing waves from a non-contact distance, comprising:

means for generating ultrasound waves including an ultrasound transducer having a distal radiation surface; and

means for creating and maintaining at least one the ultrasound standing waves in air by adjusting the non-contact distance between the distal radiation surface and ~~a surface of the~~ external wound, wherein the ~~at least one~~ ultrasound standing waves ~~creates~~ create radiation pressure for providing a bactericidal and a therapeutic effect to the external wound for decreasing the healing time for the external wound.

10. (Original) The system of Claim 9, wherein the ultrasound transducer operates at a frequency of from about 10KHz to  $10^3$  MHz.

11. (Currently Amended) The system of Claim 9, wherein the distal end of the ultrasound transducer comprises a bushing, wherein the distance between the bushing and ~~the surface of the~~ external wound is adjusted for creating and maintaining the ~~at least one~~ ultrasound

standing waves.

Claims 12-18. (Cancelled)

19. (Previously Presented) The system of Claim 9, wherein the transducer is driven by at least one of a pulsed and modulated frequency.

20. (Previously Presented) The system of Claim 9, wherein the driving wave form of the transducer is selected from the group consisting of sinusoidal, rectangular, trapezoidal and triangular wave forms.

21. (Currently Amended) The system of Claim 9, further comprising means for focusing the ~~at least one~~ ultrasound standing waves.

22. (Currently Amended) A method for treating an external wound from a non-contact distance comprising the steps of:

providing a transducer having a distal radiation surface arranged at the non-contact distance from the surface of the external wound for emitting ultrasonic waves; and

creating and maintaining ultrasound standing waves in air between the surface of the external wound and the distal radiation surface by adjusting the non-contact distance, wherein the ultrasound standing waves create radiation pressure for providing a bactericidal and a therapeutic effect to the external wound for decreasing the healing time for the external wound.

23. (Previously Presented) The method of Claim 22, wherein the transducer operates at a frequency from 10 kHz to 10,000 MHz.

24. (Currently Amended) The method of Claim 22, wherein the non-contact distance is at least 0.1 inch.

25. (Previously Presented) The method of Claim 22, further comprising the steps of:

driving the transducer by pulsed or modulated frequency; and

selecting the driving wave form of the transducer from the group consisting of sinusoidal, rectangular, trapezoidal and triangular wave forms.

26. (Currently Amended) The method of Claim 22, wherein the therapeutic effect is selected from the group consisting of increasing blood flow to the external wound, mechanically cleansing the external wound, dissolving blood clots, diffusing grafts, stimulating cell growth, providing at least one medicament to the external wound, and penetrating at least one medicament through the surface of the external wound.

27. (Currently Amended) The method of Claim 22, further comprising the steps of:

applying a drug to the external wound; and

penetrating the drug through the surface of the external wound using the radiation pressure created by the ultrasound standing waves.

28. (Currently Amended) The method of Claim 22, further comprising the step of providing a bushing around the distal radiation surface for increasing the radiation pressure created by the ultrasound standing waves, wherein the non-contact distance is between a distal end of the bushing and the surface of the external wound.

29. (Previously Presented) The method of Claim 22, further comprising the step of focusing the ultrasound waves.

30. (New) A system for treating a blood vessel having a blood clot therein comprising:  
means for generating ultrasound waves including an ultrasound transducer having a distal radiation surface; and  
means for creating and maintaining ultrasound standing waves between the distal radiation surface and an outer portion of the blood vessel, wherein the ultrasound standing waves create cavitation inside the blood vessel to facilitate dissolution of the blood clot.